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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/525,911 02/25/2005 Jan Czyzewski PL-CRC/02/06 1019 7590 08/21/2006 **EXAMINER** Michael M Rickin FANG, JERRY C Abb Inc Legal Department 4U6 ART UNIT PAPER NUMBER 29801 Euclid Avenue 2873

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/525,911	CZYZEWSKI ET AL.
	Examiner	Art Unit
	Jerry Fang	2873
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,		
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on 8/4/2006.		
2a) This action is <b>FINAL</b> . 2b) This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>1-18</u> is/are pending in the application.		
4a) Of the above claim(s) <u>1-7</u> is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>8-12 and 14-18</u> is/are rejected.		
7) Claim(s) 13 is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examiner.		
10) $\boxtimes$ The drawing(s) filed on <u>25 February 2005</u> is/are: a) $\boxtimes$ accepted or b) $\square$ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
Attachment(s)		
1) Notice of References Cited (PTO-892)	4) Interview Summar	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	Pate Patent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 8/4/2006.	6) Other:	· · · · · · · · · · · · · · · · · · ·

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "flexible" in claim 16 is a relative term which renders the claim indefinite. The term "flexible" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The passive indicator as claimed has been rendered indefinite by the use of the term "flexible".

Claim 17 is rejected as being dependent to an indefinite claim 16.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 8, 11, and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Takaoka (JP 63021568) in view of Thomson (FR 2689655) and Majumdar et al. (US 2002/0079519).

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Regarding claim 8, Takaoka discloses electrically conductive first (Fig. 1, 15) and second layers (Fig. 1, 15'), and wherein at least one of the first and second layers is at least partially transparent (Abstract); an intermediate layer disposed between the first and second layers, the intermediate layer having electrooptical properties (Fig. 1, 14). Takaoka fails to disclose wherein the first layer comprises smaller conductive portions that are separated from each other and not in contact with each other; and first and second diodes connecting the first and second layers, the first and second diodes being oriented in opposite directions with respect to the first and second layers. Thomson discloses wherein the first layer comprises smaller conductive portions that are separated from each other and not in contact with each other (Fig. 2, F1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use smaller conductive portions as taught by Thomson, with the voltage display of Takaoka, since as shown by Thomson, smaller conductive portions are commonly used in order to construct an electrical device. Majumdar discloses first and second diodes connecting the first and second layers, the first and second diodes being oriented in opposite directions with respect to the first and second layers (Para. 0021). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use diodes as taught by Majumdar, with the voltage display of Takaoka, since as

device.

shown by Majumdar, diodes are commonly used in order to construct an electrical

Regarding claim 11, Takaoka discloses wherein the second layer is transparent (Abstract).

Regarding claim 18, Takaoka discloses wherein the intermediate layer (Fig. 1, 14) functions as a display element and the first (Fig. 1, 15) and second (Fig. 1, 15') layers function as electrodes for the display element, and wherein the optical properties of the intermediate layer change when the intermediate layer is subjected to an electric field having forces disposed perpendicular to the intermediate layer (Abstract).

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takaoka (JP 63021568), Thomson (FR 2689655) and Majumdar et al. (US 2002/0079519) as applied to claim 8 above, and further in view of Hector et al. (US 2003/0030606).

Regarding claim 9, a modified Takaoka, as detailed in claim 8 rejection above, fails to disclose wherein the intermediate layer is an electrophoretic structure. Hector discloses wherein the intermediate layer is an electrophoretic structure. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an electrophoretic structure as the intermediate layer as taught by Hector, with the

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voltage display of Takaoka, since as shown by Hector, an electrophoretic structure is commonly used in order to construct a display.

Regarding claim 10, a modified Takaoka, as detailed in claim 8 rejection above, fails to disclose wherein the intermediate layer is an electrochromic structure. Hector discloses wherein the intermediate layer is an electrochromic structure. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an electrochromic structure as the intermediate layer as taught by Hector, with the voltage display of Takaoka, since as shown by Hector, an electrochromic structure is commonly used in order to construct a display device.

Claims 12 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takaoka (JP 63021568), Thomson (FR 2689655) and Majumdar et al. (US 2002/0079519) as applied to claim 11 above, and further in view of Tonar et al. (US 6,248,263).

Regarding claim 12, a modified Takaoka, as detailed in claim 11 rejection above, fails to disclose wherein the first layer is non-transparent. Tonar discloses wherein the first layer is non-transparent (Para. 0015). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a non-transparent first layer as taught by Tonar, with the voltage display of Takaoka, since as shown by Tonar, a non-transparent first layer is commonly used in order to construct a display device.

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Regarding claim 14, Takaoka discloses wherein the second layer is a unitary structure (Fig. 1, 15').

Regarding claim 15, a modified Takaoka, as detailed in claim rejection 12 above, fails to disclose wherein the second layer comprises smaller conductive portions that are separated from each other and are not in contact with each other. Thomson discloses wherein the second layer comprises smaller conductive portions that are separated from each other and are not in contact with each other (Fig. 2, F1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use smaller conductive portions as taught by Thomson, with the voltage display of Takaoka, since as shown by Thomson, smaller conductive portions are commonly used in order to construct an electrical device.

## Allowable Subject Matter

Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The allowable feature being: wherein the first portion is connected to an anode input of the first diode and the second portion is connected to a cathode output of the second diode.

#### Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Fang whose telephone number is 5712726013. The examiner can normally be reached on 10-8.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 5712722333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J.F. 8/14/2006

MOTHY THOMPSO

TIMOTHYTHOMPSON PRIMARY EXAMINER